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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,684	03/29/2004	Nicolo F. Machi	H0006251-1055	2980

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EXAMINER	
TON, ANABEL	

ART UNIT	PAPER NUMBER
2875	

DATE MAILED: 12/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/811,684	MACHI ET AL.	
	Examiner	Art Unit	
	Anabel M. Ton	2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 September 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16,24 and 27* is/are rejected.

7)☒ Claim(s) *17-23,25,26,28 and 29* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 16 ,24, 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Fredericks et al (2005/110649 A1).

2. The recitation in claim 16, " the device configured to be installed at a wing of an aircraft", has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

3. Fredericks discloses a mounting module including two side emitting LED's (94), one or more reflectors (74) operable to reflect at least a potion of light emitted by the side emitting LED's the side emitting LED's and reflectors being configured so that the light emitted by the side emitting LED's and the light reflected by the reflectors combine

according a first distribution of light and a lambertian LED operable to emit light according to a second distribution of light, wherein the lambertian LED is configured so that the first and second distributions of light combine and form a pattern of light (Although Fredericks discloses all the LED's as lambertian type, as claimed by applicant, Fredericks is considered to disclose all the limitations of this claim since the lambertian LED's alone emit light in one distribution and in combination with the reflecting surface 74, emit light of a second distribution, which when combined form a pattern of light); the shape of the reflectors is determined based on light emitting characteristics of the side emitting LED's to produce the first distribution of light;

4. In claim 27, with regards to the statement "thereby allowing the device to be mounted to each of the multiple types of mounting platform without retrofitting the device or modifying the mounting platform" has not been given any patentable weight since, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963). Applicant has not provided structure in the claim to distinguish the "multiple types of mounting platforms without retrofitting the device of modifying the mounting platform" over the mounting platform of Fredericks.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-4,15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pederson (6,462,669).

7. Pederson discloses the claimed invention except for the recitation of the components being configured so that the device is operably compatible with multiple types of mounting platforms for specifically aircraft wings. Pederson discloses a plurality of modular components including a mounting module on which one or more solid-state sources are mounted, wherein the modular components are configured so that the device is operably compatible with multiple types of mounting platforms for an automotive signaling device. Pederson discloses a plurality of modular components including a mounting module on which one or more solid state light sources are mounted wherein the modular components are configured so that the device is operably compatible with multiple types of mounting platforms (fig 33, col.8, lines36-49); a cut off shield module configured to limit the light emitted by the LED's according to predetermined angular cut off parameters (reflector 260); the mounting module comprises a heat sink (col. 25, lines 23-39).; the mounting module includes a heat sink. It would have been obvious to one of ordinary skill in the art at the time the invention

was made to modify the device of Pederson to that it may be mounted on an aircraft wing, since Pederson teaches the advantages of the signaling device which allow an observer to see the signaling device from all directions and produces differently colored, illuminated warning signals for use in an emergency. Applicant is advised that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In this case Pederson teaches that the modular components are configured so that the device is operably compatible with multiple types of mounting platforms for a vehicular signaling device. In this case applicant does not recite any distinguishing structure for the modular components or operable compatibility with multiple types of aircraft wing mount platforms therefore not patentably distinguishing the instant invention over Pederson.

8. With regards to the solid-state light sources in claim 2, Pederson discloses the claimed invention except for the recitation of the LED's emitting the colors one of "aviation red" and "aviation green". Pederson discloses the LED's as emitting a multiple array of desired light colors. It would have been obvious to one of ordinary would have been obvious to one of ordinary skill in the art at the time the invention was made to have an "aviation red" or "aviation green" colored LED in the device of Pederson, since the courts have stated that matters relating to ornamentation only which have no mechanical function cannot be relied upon to patentably distinguish the claimed invention from the prior art. *In re Seid*, 161 F.2d 229, 73 USPQ 431 (CCPA 1947).

Furthermore Pederson refers to the LED modules as being used in automobiles, helicopters or any suitable vehicular application.

9. "The recitations "the modular components are configures so that the device is operably compatible with multiple types of mounting platforms" and in claim 15 "thereby allowing the device to be mounted to the mounting platform without retrofitting the device of modifying the device to the platform" have not been given any patentable weight since, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963). In this case applicant does not recite any distinguishing structure of the device but recites the device in as a module having dimensions therefore not patentably distinguishing the instant invention over Pederson.

10. Claims 5-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pederson as applied to claim 4 above, and further in view of Bushell et al (EP 1168902 A2).

11. Pederson discloses the claimed invention except for the recitation of the heat sink comprising cooling fins in a casting of a mounting module, the base assembly including electronic circuitry that would connect the light sources to a power source

within the aircraft. Pederson also discloses circuitry in the LED base module for connecting the LED's to a power source in the vehicle. The Bushell et al discloses a light which may be an aircraft light with LED's a mounting module (10), having a heat sink with fins (38) incorporated in a casting (8) of the mounting module, a base mounting module includes electronic circuitry that connects the solid state sources to the power source within an aircraft (2, col. 4 lines 36-40). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teaching of Bushell's heat sink with fins and circuitry connecting to an aircraft in the device of Pederson, to provide a modular light device that is usable in an aircraft. Further more, heat sinks comprising fins as a means for heat emission a common embodiment of a heat sink and is old and well known in the mechanical arts. With regards to the base assembly module being replaceable, inherently it would have to be replaceable since the exterior of the aircraft where it attached to once the base fails would not be disposed of along with the base.

- Pederson discloses the base assembly module as having passive or active circuitry (passive when it's not connected and active when it is attached to a desired location and connected to a power source); the base assembly module has a current control device (microprocessor 52);
- With regard to the base assembly module including a heat sink, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a second heat sink in the base assembly module of Bushell since it has been held that mere duplication of essential working parts of a device

involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. Furthermore an additional heat sink for the base assembly module would be purposeful to provide a cooling means for the base assembly module, which is attached to a circuitry means that inherently emits heat.

- Bushell discloses threaded terminal posts and bearing nuts to attach to an aircraft and what appears to be a pivoting means to attach the mounting module to the base assembly module; at least one screw and corresponding clearance holes in the mounting module, base assembly and aircraft mounting surface. (Col. 3 lines 55-58, col. 4 lines 1-4). With regards to the device being mounted on an aircraft wing it would have been obvious to one of ordinary skill in the art at the time the invention was made to attach the device of Bushell to an aircraft wing, since it has been held that rearranging parts of a prior art structure involves only routing skill in the art. *In re Japikse*, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950). Furthermore, mounting an LED light source for aviation illuminating applications on a wing of an aircraft is old and well known in the art for the purpose of illuminating a desired portion of the wing or forwardly of the wing (see cited art Lodhie et al);

Allowable Subject Matter

12. Claims 17-23,25,26,28,29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

13. Applicant's arguments filed 09/29/05 have been fully considered but they are not persuasive. Applicant argues that the LED's of Fredericks are not side emitting LED's the examiner disagrees since the claims are given their broadest reasonable interpretation in light of the supporting disclosure. In re Morris, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. E-Pass Techs., Inc. v. 3Com Corp., 343 F.3d 1364, 1369, 67 USPQ2d 1947, 1950 (Fed. Cir. 2003) (Claims must be interpreted "in view of the specification" without importing limitations from the specification into the claims unnecessarily). In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969). See also In re Zletz, 893 F.2d 319, 321-22, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989). In this case the recitation "side-emitting LEDs " is satisfied by Frederick since Frederick discloses the LEDs in a side mounted position thus the LEDs emit light from the side of the lighting device. Applicant argues Pederson fails to disclose the feature of the device being operably compatible with multiple types of mounting platforms for aircraft wings and that Pederson fails to disclose any type of mounting platform for an aircraft wing. This argument has been addressed with the USC 103(a) rejection as mentioned above. Furthermore, applicant's recitation of the device being operably compatible with multiple types of mounting platforms for aircraft wings does not patentably distinguish over Pederson since In, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed

invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. Applicant does not recite any type of distinguishing structure for the modular components and recites the modular components as being configured for being operably compatible with multiple types of mounting platforms *for aircraft wings*. Such a recitation does not constitute a structural difference between the instant invention and the prior art but only presents an intended use of the device, in this case for use with aircraft wings.

Conclusion

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anabel M. Ton whose telephone number is (571) 272-2382. The examiner can normally be reached on 08:00-16:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Anabel M Ton
Examiner
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AMT

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